

CLASS TITLE: SENIOR SANITARY ENGINEER

Class Code: 02900300
Pay Grade: 31A
EO Code: B

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To be responsible for the work of a staff engaged in a sanitary engineering program; to perform professional engineering work involving complex problems in sanitary engineering; and to do related work as required.

SUPERVISION RECEIVED: Works under the general supervision of a superior with latitude for the exercise of initiative and independent judgement; work is subject to review for application of accepted sanitary engineering methods and techniques.

SUPERVISION EXERCISED: Plans, supervises, and reviews the work of subordinate engineering, technical and clerical employees.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To plan and supervise the work of a staff engaged in:

- the promotion of the establishment of safe drinking water supplies, the periodic determination of the sanitary quality of all public water supplies, and, when requested, the determination of the sanitary quality of private and industrial water supplies;

- the certification to the appropriate federal agency of the sanitary quality of all water supplies and the sanitation of all watering points used by interstate carriers;

- the control of stream, lake, and tidal water pollution through: the making of field surveys to determine the degree of pollution, including the collection of physical data and the making of chemical determinations in the field; the making of laboratory examinations of samples of water, sewage, and industrial waste: the making of field surveys of the sources of pollution and their magnitude; the analysis of the survey data and the planning of the highest future sanitary condition of the waters of the State that can be feasibly attained; the determination of the sewage and industrial waste treatment facility projects needed to achieve the planned conditions.

- the determination of the sanitary condition of shellfish grounds and, on the basis of such determination, the regulation of the taking of shellfish therefrom;

- the studying and reporting on engineering plans of private, municipal, and industrial sewage and waste pollution; also the studying and reporting on plans for private, municipal, or industrial sewage disposal systems no essential to the prevention of water pollution, but necessary to avoid the establishment of unsanitary or unhealthful conditions; and

- the studying and reporting on engineering plans of private, municipal, and industrial sewage and waste treatment systems essential to the prevention of water pollution; also the studying and reporting on plans for private, municipal, or industrial sewage disposal systems not essential to the prevention of water pollution, but necessary to avoid the establishment of unsanitary or unhealthful condition; and

- the determination of the sanitary quality of the waters of all bathing areas and the control of other phases of environmental sanitation.

To prepare recommendations to municipalities, industries, and individuals relative to: treatment measures necessary to assure the safety of drinking water supplies; treatment measures such as fluoridation to combat tooth decay; the elimination of dangerous cross connections or interconnections of safe and unsafe water supplies, or of the adoption of devices to safely control such connections.

To promote the voluntary establishment, by municipalities or industries of individuals, of recommended water pollution control improvements or to recommend to a superior that legal action be taken to effect such improvements; to prepare engineering testimony for presentation at hearings to substantiate the charge of pollution as defined by law.

To be responsible for the examination of engineering reports, concerning proposed sewage and industrial waste treatment plants, water treatment plants, and swimming pools, submitted for approval by engineers or architects retained or employed by municipalities, industries, or private individuals; to recommend to a superior the approval of such plans, if they are satisfactory, or to recommend specific changes in design, location, capacity, etc.

To review reports of all staff surveys and investigations, interpret findings, prepare written reports, and make recommendations to a superior; to draft rules and regulations relative to the design and operation of sanitary facilities.

To consult with local health authorities in the development of local sanitation programs; to appear before city or town councils and various local organizations to explain local sanitation needs and to explain state policy regarding such needs.

To perform other professional engineering work involving complex problems in sanitary engineering.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A thorough knowledge of the principles and practices of sanitary engineering as they relate to water supply and purification, sewage and industrial waste treatment, and stream pollution control; a working knowledge of bacteriology and chemistry as they apply to public health problems concerning water, sewage, and industrial waste; the ability to read and interpret complex engineering plans and specifications, particularly those relating to water purification, industrial waste, and sewage treatment and disposal facilities; the ability to make recommendations on complex engineering problems relating to the improvement of the design, location, operation, and maintenance of such facilities; the ability to plan, supervise, and participate in sanitary engineering investigations; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: graduation from a college of recognized standing with specialization in either Sanitary Engineering, Civil either Sanitary Engineering, Civil Engineering with a sanitary option or chemical engineering and advanced study, at the graduate level, in Sanitary Engineering or Public Health Engineering and

Experience: Such as may have been gained through: employment in an engineering capacity in a sanitary engineering program involving sanitary control of water or the treatment of sewage and industrial waste.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

SPECIAL REQUIREMENT: At the time of certification must possess at least an Engineer-In-Training certificate of registration issued by the Rhode Island Board of Registration issued by the Rhode Island Board of Registration for Professional Engineers and Land Surveyors and must maintain such registration as a condition of employment.

Class Revised: December 22, 1985

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